Amendments to the Claims

In response to the Office Letter mailed 05/20/2005, kindly amend the claims of the above application as follows:

Claims 1-13 (canceled)

Claim 14 (currently amended): A method to convert digital composite video to standard RGB color components comprising the steps of:

detecting a horizontal line start;

detecting the DC level of the color burst sub-carrier for said horizontal line;

detecting the phase of the color burst sub-carrier for said horizontal line;

processing the digital composite samples of said horizontal line with respect to said color burst DC level to generate a gray-scale component;

processing the digital composite samples of said horizontal line with respect to said color burst phase to generate a first color ~~components~~ component and a second color component; and

processing said gray-scale component, first color component, and second color component to generate standard color components R, G, and B for said horizontal line.

Claim15 (previously presented): The method of Claim 14, wherein the digital composite video samples of said horizontal line are interpolated to determine a more precise line start reference with respect to preceding and subsequent horizontal lines.

Claim 16 (previously presented): The method of Claim 14, wherein said DC level of the color burst sub-carrier is detected by averaging the digital video samples constituting the sub-carrier signal.

Claim 17 (previously presented): The method of Claim 14, wherein said phase of the color burst sub-carrier is detected by performing at least one DFT computation to determine the coefficient of the frequency component closest to said sub-carrier frequency.

Claim 18 (previously presented): The method of Claim 14, wherein said gray-scale component is obtained by using the DC level of the color burst as the black level reference of a gray-scale representation.

Claim 19 (previously presented): The method of Claim 14, wherein said first color component is obtained by mixing a regenerated sub-carrier frequency having said detected phase with the digital composite video samples of said horizontal line.

Claim 20 (previously presented): The method of Claim 14, wherein said second color component is obtained by mixing a regenerated sub-carrier frequency having said detected phase, offset by 90 degrees, with the digital composite video samples of said horizontal line.

Claim 21 (previously presented): The method of Claim 14, wherein standard color components R, G, and B are a linear transformation of said gray-scale component, first color component, and second color component.

Claim 22 (new): An apparatus to convert analog composite video to RGB color components without a phase-locked loop, comprising an analog-to-digital converter and a digital signal processor, wherein the black level of each video line of said analog composite video is determined by computing the average of digitized video samples between the horizontal sync pulse and the modulated video signal portions of said video line.

Claim 23 (new): The apparatus of Claim 22, wherein digital composite video samples of the modulated video signal portion of said video line are processed with respect to said black level to obtain a gray-scale component.

Claim 24 (new): An apparatus to convert analog composite video to RGB color components without a phase-locked loop, comprising an analog-to-digital converter and a digital signal processor, wherein the color burst phase of each video line of said analog composite video is determined by performing a DFT computation of digitized video samples between the horizontal sync pulse and the modulated video signal portions of said video line, to determine at least one coefficient term of the frequency closest to the color sub-carrier of said video line.